June 1977 NSRP 0003

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# THE NATIONAL SHIPBUILDING RESEARCH PROGRAM

Proceedings of the REAPS Technical Symposium

Paper No. 3: A Low Cost Parts Definition System

U.S. DEPARTMENT OF THE NAVY
CARDEROCK DIVISION,
NAVAL SURFACE WARFARE CENTER

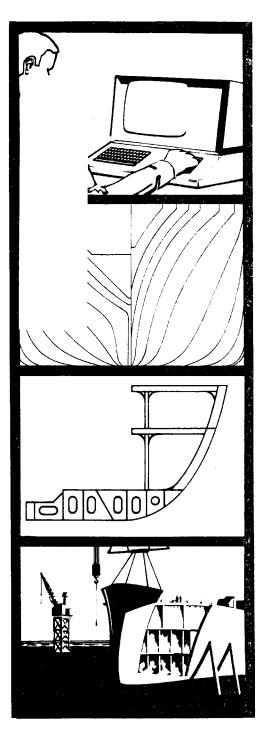
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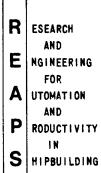
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A LOW COST PARTS DEFINITION SYSTEM

Arthur F. Kaun

Newport News Shipbuilding and Dry Dock Company

Newport News, Virginia

Mr. Kaun is currently developing an interactive graphics approach to parts definition for NNSDD in accordance with the MarAd funded project. He is also responsible for the general support of AUTOKON and related computer systems.

## LOW COST PARTS DEFINITION

### **Benefits**

- 1. Utilize : Graphical Skills
- 2. Reduce Computer Costs
- 3. Increase Thruput
- 4. Reduce Plotting
- 5. Introduce New Capabilities

#### Newport News Shipbuilding



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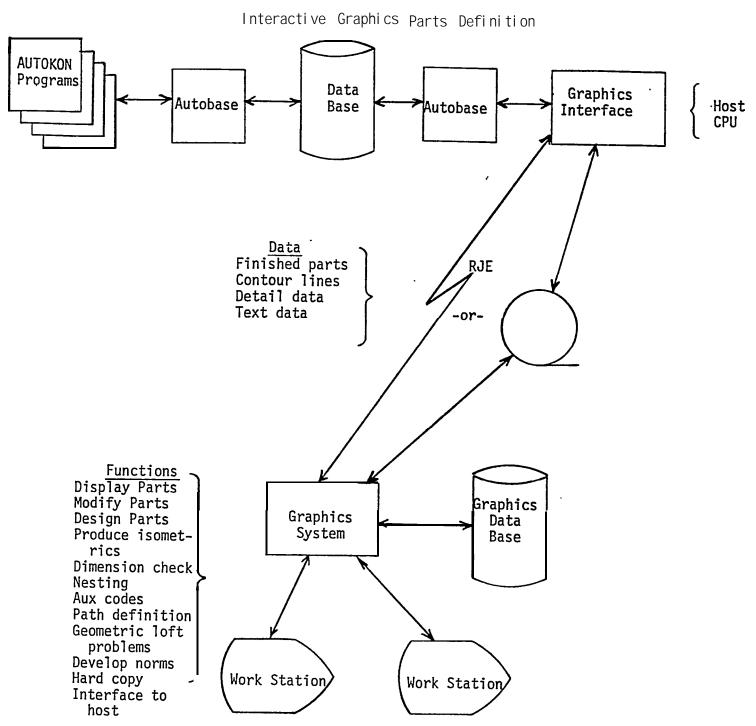
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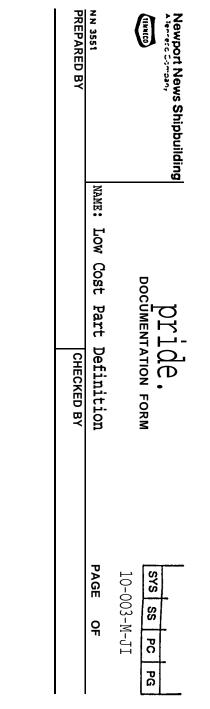
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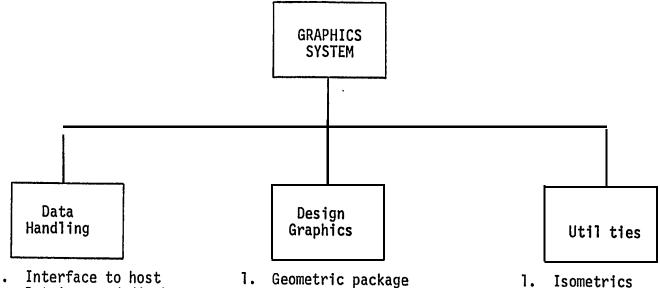
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- Retrieve and disp ay
  - A. Parts
  - B. Contours
  - C. Data Specifications
- Store data
- Retrieve norms

- A. New parts
  B. Modify parts
- C. Loft problems
- 2. Contour usage
- Norm usage
- 4. Layering
- 5. AUX codes
- Path definition

- Nesting
- Norm development Dimension checking
- 5. Hard copy6. Remote Job Entry
- 7. Post processors
- Digitizing

## ACTION TO DATE

- 1. Interviewed Five Vendors
- 2. Part Development Exercise
- 3. Data Specifications
- 4. User Review Group
- 5 Budgetary Quotes
- 6. Tektronix PLOT/PEDIT
- 7. Develop Benchmark

# PLAND ACTOR

#### July 1977

- -Perform Benchmarks
- -Possible Demo for User Review Group
- -Analyze Benchmark Results

## August 1977

- -Develop System Design Specs
- -Final User Review Group Meeting
- -Final Report

Additional copies of this report can be obtained from the National Shipbuilding Research and Documentation Center:

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